Findings from First Aid Qualitative Interviews

The consumer interviews on the wording of First Aid statements generated many findings. The researchers identified a number of findings regarding precautionary and first-aid statements based on the 23 one-on-one interviews. This section first summarizes general results applicable to all First Aid statements, and then examines specific results for each statement tested.

General Findings

- 1. Confirming Phase I results, consumers in these interviews indicated that they did not regularly read the product labels.
- 2. Interviewees responded best to simple, very specific first-aid statements that explained what they actually could do themselves. They also seemed more inclined to do what was called for when it was most specifically stated ("Rinse skin for 10-15 minutes," rather than, "Rinse skin thoroughly").
- 3. On label format, the interviewees preferred short, bulleted sentences that did not wrap around onto the following line.
- 4. Interviewees also responded well to instructions for something concrete to do in a panic situation (e.g., "First give water, then call a doctor"). Giving an instruction that the person could follow and feel that they were taking a practical action seemed to have a calming effect. As one interviewee said, "Don't make me think in an emergency, tell me specifics if the most appropriate action is to call a Poison Control Center, then say that rather than 'Get medical advice."
- 5. The consumers interviewed followed advice they learned in the past. Even when they were in a situation where the First Aid information on the label would have been helpful, their instinct was to follow instructions they had heard before ("induce vomiting," for example), rather than look at the label of the product for First Aid information.
- 6. The qualitative research found that interviewees did not look on the label for the Poison Control Center number. Most of the consumers interviewed seemed to know that the number is in the telephone book under emergency numbers. People with children had the number more handy than people without.
- 7. Interviewees' interpretations of the term "rinsing" varied widely. The consumers interviewed indicated that they stop "rinsing" as soon as the irritation stops.
- 8. Virtually all of the people interviewed believed that injuries to the skin were much less serious than injuries to the eyes.
- 9. Interviewees had no perception of dermal absorption (that a substance can be absorbed through the skin, causing harm). They believed that if the product was harmful, they would feel it or see the effects on their skin (the irritation concept).

Findings Specific to Particular First Aid Statements

Specific findings are presented according to the type of First Aid statement tested. The First Aid statements give instructions on what to do in case of exposure to a potentially harmful product. As described earlier, First Aid instructions are tailored to the exposure scenario and toxicity category (defined by FIFRA) of the particular product. First Aid statements related to particular exposure scenarios are lettered arbitrarily for ease of reference. The revised format of each proposed First Aid statement reflects interview results, and comments from the American Red Cross, the Consumer Product Safety Commission, the American Poison Control Centers, the Communications Task Force of the Pesticide Program Dialogue Committee, and other CLI Partners and Stakeholders. As mentioned above final versions of the First Aid label statements are expected to be released in Fall/Winter 1999, and will take into consideration all of these comments and revisions, as well as results from the Phase II quantitative and qualitative research.

Results Relating to the Initial Medical Phrase on a Product Label

Interview participants viewed the following three versions of the message to seek medical treatment:

Get medical advice.

Get medical attention.

Call a doctor or poison control center for further treatment advice.

The first interviews did not reveal much information. This may have been due to the fact that the statements were vague and were not placed in context for the participants. Although participants frequently considered all three statements to mean the same thing, they appeared to prefer the phrase, "Call doctor or poison control center for further treatment advice."

In interviews 18-23, participants instead were questioned on the wording of the phrase within the context of other statements. In the context of other First Aid statements, people seemed to prefer, "Call doctor or poison control center for further treatment advice," to the other versions.

First Aid Statement Relating to Ingestion

For Acute Oral Contact with a Product in Toxicity Category 1, 2, or 3

The following versions of the First Aid instruction for ingestion of a product in toxicity category 1, 2 or 3, were shown to each interviewee:

If person is able to swallow, give sips of milk or water. Call a doctor or poison control center for further treatment advice.

If swallowed, immediately call a Poison Control Center or doctor and follow their advice. Drink a glassful of water.

If the person is alert and able to swallow, give sips of milk or water. Call a doctor or poison control center for further treatment advice.

Most interviewees were confused by the meaning of some of these words and phrases. They interpreted the phrase "drink a glassful" to mean "all at once" and thought that the word "sips" meant "drink only a small quantity, not a glassful." Several respondents noted that having the "give sips" direction located before the "call poison control center" had a calming effect on them and would enable them to take control of the situation better. The phrase "alert and able" was unclear to respondents because some people did not understand the word "alert," while the phrase "able to swallow" seemed clearer. The "milk or water" phrase also caused confusion. Some people thought that milk would neutralize the negative effects of the product or coat the throat and digestive system. One woman suggested that milk would induce vomiting, while several respondents felt that people might "react to milk," and so water should be used.

Furthermore, many respondents had read First Aid statements at some time in the past instructing them to induce vomiting, so even though these tested directions did not mention inducing vomiting, some of them said that they would do so anyway. Many of them said they would induce vomiting by syrup of ipecac. Within a larger context, several observers mentioned that if certain common behaviors should not be followed, labels should provide specific information advising it. No one mentioned sticking fingers down the throat to induce vomiting. It therefore seemed that this instruction was not frequently read, and would not be missed if it was removed.

Based on the consumer interviews and input from the American Red Cross, the Consumer Product Safety Commission, the American Poison Control Centers, the Communications Task Force of the Pesticide Program Dialogue Committee, and other CLI Partners and Stakeholders, the suggested statement on ingestion for category 1, 2, or 3 products reads as follows:

- Call a poison control center or doctor immediately for treatment advice.
- Have person sip a glass of water if able to swallow.
- Do not induce vomiting unless told to by poison control center or doctor.

First Aid Statements Relating to Skin Exposure

For Acute Dermal Contact with a Product in Toxicity Category 1 or 2

(There Is No Category 3 for Dermal Contact)

Participants read the following versions of the First Aid statement:

Rinse area of contact thoroughly with running water. Call a physician or poison control center for further treatment advice.

Rinse skin thoroughly with running water. Call a doctor or poison control center for further treatment advice.

Remove contaminated clothing. Rinse skin immediately with plenty of water. Obtain immediate medical advice.

There were many different interpretations of the phrase "rinse skin thoroughly." Some people interpreted it as requiring them to scrub their skin. Others felt that this instruction implied rinsing should occur for a long time; when asked how long was "long," they replied, "Oh, two or three minutes." Still others thought that to rinse skin thoroughly one would have to use soap or some other cleansing agent. Interviewees perceived the message containing the phrase "rinse skin

thoroughly" to be giving the same instructions as the messages for skin irritation (see section C and D, below).

None of the participants for this study were familiar with the concept of dermal toxicity (i.e., something being toxic if it is absorbed through the skin). "Even when the moderator mentioned that some products can be absorbed into the skin and cause damage, the respondents indicated that they could tell that things were okay if they had no burning or tingling sensation on the affected area."

There was a marked difference in perception between the statement, "Remove contaminated clothing. Rinse skin immediately with plenty of water. Obtain immediate medical advice," and the others. The phrase "Remove contaminated clothing" implied a much more serious circumstance to all of the respondents. The combination of the words "remove clothes," "contaminated," and "immediately" contributed to the potency of the message.

As a way of determining what consumers would do in a given situation, and to ascertain if they need specific directions for emergency situations, participants were asked what they would do if they spilled a pesticide on themselves. Some participants mentioned removing contaminated clothes; others did not. Some of the participants who did not mention clothing removal claimed later that "of course" they would take the clothes off; they just had not said so earlier.

Based on the consumer interviews and input from the American Red Cross, the Consumer Product Safety Commission, the American Poison Control Centers, the Communications Task Force of the Pesticide Program Dialogue Committee, and other CLI Partners and Stakeholders, the suggested statement on skin exposure for an acute dermal exposure to a product in toxicity category 1 or 2 was suggested as follows:

- Take off contaminated clothing.
- Rinse skin immediately with plenty of water for 15-20 minutes.
- Call a poison control center or doctor for treatment advice.

For Skin Irritation from a Product in Toxicity Category 1 or 2

Since language for this category is very similar to that for other skin categories, statements regarding this category were not specifically tested. As a result of the finding that interviewees did not recognize the difference between "skin irritation" and "dermal absorption," it was suggested that the First Aid language defined above, in section B, for acute dermal could be used instead.

⁸ Draft Summary Report, Consumer Interviews on First Aid Label Information, September 3, 1997. (A copy of this report can be found in the EPA Public Docket, Administrative Record, AR-139.)

For Skin Irritation from a Product in Toxicity Category 3

Participants were presented the following two versions of the instruction of what to do if skin were exposed to a product identified in toxicity category number 3:

Rinse skin thoroughly. Call a doctor or poison control center for further treatment advice if irritation persists.

Rinse skin for 10-15 minutes. Call a doctor or poison control center for further treatment advice.

Most of the participants said that they preferred the statement that gave specific instructions about how long to rinse, rather than the statement to "rinse thoroughly." Some even said that the specific instructions had a calming effect on them because it told them exactly what to do, so they did not have to worry about whether or not they were "doing it right."

Although participants appeared to understand what was meant by the term "irritation" (i.e., redness, itching, burning, tingling, rash, welts), Most people were unable to distinguish between the relative severity of dermal toxicity and the less severe skin irritation. Participants also seemed to have more concern about the risk of potential eye damage than skin damage.

Based on consumer interviews and input from the American Red Cross, the Consumer Product Safety Commission, the American Poison Control Centers, the Communications Task Force of the Pesticide Program Dialogue Committee, and other CLI Partners and Stakeholders, the statement on skin irritation for a category 3 product was revised by EPA's Office of Pesticide Programs. The suggested First Aid statement is now the same as for toxicity categories 1 and 2.

First Aid Statement Relating to Inhalation

For Acute Inhalation of a Product in Toxicity Category 1, 2 or 3

The following versions of the First Aid statement on inhalation of a category 1, 2 or 3 product were presented to interviewees:

If breathing is affected, get fresh air immediately. Get medical attention. If not breathing, give artificial respiration.

Move person to fresh air. If not breathing, give artificial respiration and call an ambulance. Call a doctor or poison control center for further treatment advice.

Remove victim to fresh air. If not breathing, give artificial respiration and call an ambulance. Call a doctor or poison control center for further treatment advice (This statement was presented for the first 17 interviews.)

Move person to fresh air. If breathing is affected, call doctor or poison control center. If person is not breathing, call ambulance and give artificial respiration. (This statement was added for the last 6 interviews)

Most participants during the first 17 interviews did not like the word "victim," so the statement containing the phrase, "Remove victim to fresh air," was not shown during the last six interviews and a new statement was added in its place.

Interview results suggested that if the "Call an ambulance" advice was given first in order to solicit help right away, then people would feel that they were doing something constructive. Interview results indicated that most people did not know how to perform artificial respiration. Some found it scary if that was the only advice given. Although only one or two participants knew how to perform artificial respiration, most said that they would try to do it if no one else were around to give help.

Most of the participants preferred, "Call a doctor or poison control center," to the phrase, "Get medical attention." Interestingly, the phrase, "Get fresh air," was sometimes interpreted as bringing fresh air to the person, such as getting a fan or bringing oxygen to the person.

None of the statements was understood by all. For the last six interviews, the following wording was tested:

Move person to fresh air. If breathing is affected, call doctor or poison control center. If person is not breathing, call ambulance and give artificial respiration.

This revised statement appeared to be better understood.

Based on consumer interviews and input from the American Red Cross, the Consumer Product Safety Commission, the American Poison Control Centers, the Communications Task Force of the Pesticide Program Dialogue Committee, and other CLI Partners and Stakeholders, the statement was revised by EPA's Office of Pesticide Programs. The suggested First Aid statement on inhalation of a product in toxicity category 1, 2 or 3 is:

- Move person to fresh air.
- If a person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible.
- Call a poison control center or doctor for further treatment advice.

First Aid Statements Relating to the Eyes

For Eye Irritation from a Product in Toxicity Category 1 or 2

Each person was asked to first read aloud the following statements about what to do in the case of eye exposure to a product in toxicity category 1 or 2, and then to demonstrate to the interviewer how he/she would accomplish the task:

In case of eye contact, immediately flush eye thoroughly with water for 10-15 minutes. Call a poison control center or doctor if irritation persists.

Open eyelid and rinse eye slowly and gently with water. Continue to rinse eye for 10-15 minutes. Call a doctor or poison control center for further treatment advice if irritation persists.

Virtually all of the interviewees indicated that they considered eye injuries to be among the most serious. "My eyes are very important to me" was a typical statement.

Participants had a wide variety of techniques for rinsing the eye. Some demonstrated holding their heads over a washbasin and cupping water with their hands to "rinse" the eye, or holding their head tilted under a faucet and letting water run over it. Others said they would tilt their head back, hold the eye open, and pour water from a glass. Still others said they would dab at the eye with a wet rag, use an eyedropper to drip water into the eye, or use an eye wash. (At least two of the respondents said they had eye wash devices in their homes.)

When it became evident that the phrase "open eyelid" was confusing to participants, the moderator tried several other phrases such as "hold eye open," "hold eyes open," and "hold eyelids open." The phrase "hold eyes open" elicited a number of responses. Some participants said that they would use their hands to physically hold the eye open, while others said they would "hold it open with the muscle" in the eye. "Hold eyelids open" was interpreted by some the same as "hold eye open," while others said that it meant to turn the eyelids out and away from the eye. Overall, the term "hold eye open" appeared to work better.

The word "flush" was sometimes misunderstood to imply volume and speed, despite the fact that the rest of the direction specified that the action be undertaken "slowly and gently." Some people thought that "slowly and gently" implied that faster flushing would cause damage to the eye.

Several participants said that they appreciated the directions in one message to use lukewarm water because, "I wouldn't have known that."

The singular word "eye" was clearer than "eyes" or "eyelids." The original messages included "eyes" in the plural. Once the phrases were changed to the singular, people had an easier time interpreting the message, as a few participants said, "How am I going to hold my eyes open and then flush water on them?" implying that their hands would be full just holding the eyes open.

Based on consumer interviews and input from the American Red Cross, the Consumer Product Safety Commission, the American Poison Control Centers, the Communications Task Force of the Pesticide Program Dialogue Committee, and other CLI Partners and Stakeholders, the suggested statement for eye irritation from a product in toxicity category 1 or 2 read as follows:

- Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing.
- Call poison control center or doctor for treatment advice.

For Eye Irritation from a Product in Toxicity Category 3

Participants looked at the following First Aid instruction regarding eye exposure to a product ranked in category 3:

Hold eye open and rinse with lukewarm water for 10-15 minutes. Call a doctor or poison control center if irritation persists.

Findings were very similar to those of eye irritation categories 1 and 2 (see Section F, above).

Based on consumer interviews and input from the American Red Cross, the Consumer Product Safety Commission, the American Poison Control Centers, the Communications Task Force of the Pesticide Program Dialogue Committee, and other CLI Partners and Stakeholders, the suggested statement was the same as the instructions for eye irritation from a product in toxicity category 1 or 2, but the phrase "if irritation persists" was added to the end. The suggested statement for eye exposure to a toxicity category 3 product reads the same as that for toxicity categories 1 and 2.

The Notes Section of the First Aid Label

Respondents were shown two versions of a note that instructs people to bring the product with them if seeking medical assistance.

NOTE: When calling poison control center, have product label accessible. If advised to seek treatment in an emergency room or doctor's office, bring the product label to show medical personnel.

NOTE: When calling for treatment advice, have product label available. If advised to seek treatment, bring product and label with you.

Part of the wording on the note was misunderstood. Some participants misunderstood the word "accessible," while others did not interpret "available" to mean "right at hand." A few of the people interviewed thought that the note was directing them to call the poison control center.

Based on consumer interviews and input from the American Red Cross, the Consumer Product Safety Commission, the American Poison Control Centers, the Communications Task Force of the Pesticide Program Dialogue Committee, and other CLI Partners and Stakeholders, the suggested text for the note reads as follows:

- When calling the doctor or poison control center, have product label available.
- When going to the emergency room or doctor's office, take the product and label with you.